Section 1: **School Readiness**

For Children Ages 3 to 5 Adaptable for Children Birth to 3

Making It Work!









Office of Head Start National Center on Cultural and Linguistic Responsiveness

Connecting Cultural Learning Experiences in American Indian and Alaska Native Classrooms and Communities with The Head Start Child Development and Early Learning Framework

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Contact Information:

Office of Head Start National Center on Cultural and Linguistic Responsiveness 699 Hampshire Road, Suite 210 Education Development Center, Inc. Westlake Village, CA 91361

Phone toll free: 855-494-0331

Fax: 805-494-0338

Email: NCCLRinfo@edc.org

Website: http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/cultural-linguistic

When asked, "What do you wish for your grandson?" a Cochiti Pueblo grandfather of a first-year Head Start student replied, "I understand that English, science, math, and so forth are important for my grandson. I know he will learn those things. But my main concern is that he won't learn our language and the Pueblo ways of life. To me, those are more important because it will teach him what it means to be Cochiti and to be a human being in a complex modern world. If he has a strong Cochiti foundation, then he will learn with confidence anything he puts his mind to. He can leave Cochiti and see the world, earn a degree, acquire a profession, and always come back knowing he is Cochiti and what that requires."

—Mary Eunice Romero
Perpetuating the Cochiti Way of Life: A Study of Language
Socialization in a Pueblo Community



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Staff from University Outreach and Engagement at Michigan State University:

- Jessica Barnes, PhD, Associate Professor
- Pat Farrell, PhD, Assistant Provost
- Hiram E. Fitzgerald, PhD, Associate Provost

Staff from Michigan State University, Department of Human Development and Family Studies:

· Hope Gerde, PhD, Assistant Professor

Other Contributors:

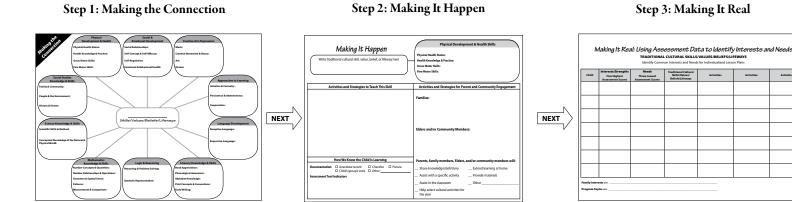
- · Malinda Besett, Director, Kawerak Head Start, Alaska
- · Alan Dick, NCCLR Consultant
- Helen Dick, NCCLR Consultant
- Donna Fischer, NCCLR Consultant
- Renetta Goeson, Early Childhood Education Specialist, Region XI
- Evelyn Klimpel, NCCLR Consultant
- Charmaine Lundy, NCCLR Consultant
- Debra Shuey, NCCLR Consultant

Introduction

Making It Work! is a tool you can use to

- 1. connect traditional cultural skills, values, beliefs, and lifeways to The Head Start Child Development and Early Learning Framework;
- 2. create cultural lessons that engage families and communities, and document children's progress using your program's assessment process; and
- 3. align children's interests and needs to create individualized lesson plans for each child and small groups.

Making It Work! is designed for teaching children ages 3–5 but may be adapted for children ages birth–3.



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Traditional Cultural Skills, Values, Beliefs, and Lifeways:

Paths to School Readiness for American Indian and Alaska Native Children

Head Start programs support children to grow and thrive in school and in life. Recent Head Start requirements have more clearly stated this goal and the responsibilities Head Start staff have to support children's optimal development.

"School readiness goals" mean the expectations of children's status and progress across domains of language and literacy development, cognition and general knowledge, approaches to learning, physical well-being and motor development, and social and emotional development that will improve their readiness for kindergarten.

— 45 CFR Chapter XIII, Head Start Regulation Part 1307.2

In fact, the *Improving Head Start for School Readiness Act of 2007* requires that Head Start programs set goals that reflect the revised Head Start outcomes framework:

[Head Start programs] . . . shall establish . . . program goals for improving school readiness of children participating in a program . . . including school readiness goals that are aligned with the Head Start Child Outcomes Framework [recently revised as The Head Start Child Development and Early Learning Framework], State early learning standards as appropriate, and requirements and expectations of the schools the children will be attending.

— The Improving Head Start for School Readiness Act of 2007, ACF-PI-HS-11-04. 641A(g)(2)(A)

Traditional lifeways, language, and cultural heritage are important contributions to young children's school readiness. *Making It Work!* supports American Indian and Alaska Native (AIAN) early childhood staff to address Head Start school readiness requirements even as they teach their lifeways. The document explains for staff and families the four important parts of working with children:

- · What they are teaching
- Why it matters for a child's development of his or her physical, emotional, mental, and/or spiritual well-being
- · How their traditional cultural skills, values, beliefs, and lifeways align with state and local school expectations
- How family and community engagement supports children's learning at home and in the classroom using strategies that can close the achievement gap for children living in poverty

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Culturally Responsive School Readiness

On the first day of school, every child in Winona Howe's Head Start classroom stands in a circle along with his and her family. Winona offers an elder Sweetgrass and asks her to bless the class with a prayer to the Creator. Following the prayer, another elder sings a round dance song. She encourages the children to move their feet in side-step rhythmic patterns that accompany the words and beats of the drum. At the end of the song everyone shakes each other's hands and exchanges a greeting. The family members leave the classroom for coffee in the cafeteria while the children transition to sitting in a circle.

Winona motions "come here" as well as verbally directs the children to sit in the circle. She listens to the children's conversation of the morning activity. She begins by asking the children questions about the gift of Sweetgrass for the elder. Next she compliments their listening skills during the prayer.

The children liked moving their feet and bodies to the flow of the round dance song. However, Winona knows that she's giving them more than some exercise and fun. She knows that she is using this round dance activity to honor her students and their families' heritage and to prepare them for school and lifelong learning.

Throughout the year, Winona will implement *Making It Work!* by

- connecting the community's traditional cultural skills, values, beliefs, and lifeways to The Head Start Child Development and Early Learning Framework;
- using the research to show how each area of learning is important for children's development and how that learning relates to children's cultural lifeways;
- aligning state guidelines to her program's cultural curriculum;

- being able to talk about how all three
 —the domains, the research, and the state quidelines—fit together;
- engaging parents, families, and community members to support children's learning of their cultural lifeways at home as well as in the classroom.

While individual Head Start programs must work within their state and local guidelines, the following pages show the many connections that exist in what all adults want for young children: to develop the skills they need to thrive in all aspects of their lives, now and in the future.

The Head Start Child Development and Early Learning Framework

Promoting Positive Outcomes in Early Childhood Programs Serving Children 3-5 Years Old

- The Head Start Child Development and Early Learning Framework (HSCDELF) lays out the essential areas of children's learning and development to guide Early Childhood Education professionals and families in supporting children to be ready for school.
- The HSCDELF domains △ and domain elements ▶ apply to all 3- to 5-year-olds in Head Start and other early childhood programs, including dual language learners and children with disabilities.



There are many paths to the top of the mountain.

—Proverb

The Head Start Child Development and Early Learning Framework:

Promoting Positive Outcomes in Early Childhood Programs Serving Children 3–5 Years Old

△ Domain Social & Emotional Development Domain I Physical Development & Health ▶ Social Relationships ▶ Physical Health Status ▶ Self-Concept & Self-Efficacy ▶ Health Knowledge ▶Self-Regulation & Practice ▶ Emotional & Behavioral ▶Gross Motor Skills ▶Fine Motor Skills ►Music ▶Family & **Physical** ▶ Creative Movement Social Community & Dance & Emotional ►History & Events ►Art ▶People & the ▶ Drama Environment Skills B ▶ Scientific Skills ►Initiative & Curiosity & Method ▶Persistence & B D ▶ Conceptual Attentiveness Knowledge of the ▶ Cooperation Natural & Physical World Language & Literaci Number Concepts & Quantities Number Relationships & Operations ▶ Receptive Language ▶ Geometry & Spatial Sense. ▶ Expressive Language. ▶ Patterns ► Measurement & ▶ Book Appreciation Comparison ▶Reasoning & ▶ Phonological Problem Solving Awareness ▶Symbolic ▶Alphabet Knowledge Representation ▶ Print Concepts & Conventions ► Early Writing Literacy Knowhedge & Skills Logic & Reasoning English Language Development The ten domains above apply to all children. ▶ Receptive English Language Skills One domain, English Language Development, ▶ Expressive English Language Skills applies only to children who are dual language ▶ Engagement in English Literacy Activities learners (DLLs). These children speak a language other than English at home.

△ Domain

Domain el

Making It Work!



Connect your cultural lifeway to the HSCDELF and your school readiness goals in Making the Connection.



Teach the activities you have chosen from Making It Happen, knowing that those activities are already aligned to your lifeway, the HSCDELF skills, and your school readiness goals.

Determine the cultural skills that support your school readiness goals.



Match each child's interests to his or her needs in Making It Real by choosing activities from Making It Happen that you then individualize and target for each child.

Connecting School Readiness Goals to Traditional Cultural Skills, Values, Beliefs, and Lifeways

Write your cultural skills that are aligned to the **HSCDELF** and school readiness goal into the Making It Happen box.



Choose how to document and assess progress in the selected cultural skills and school readiness goals.



Plan activities that teach the lifeway(s), skill(s), and goal(s) you selected. Choose activities to engage families and community members.



Physical Development & Health

What are the HSCDELF domain elements we are teaching?

- Physical Health Status
- Health Knowledge & Practice
- Gross Motor Skills
- Fine Motor Skills

WHY DOES IT MATTER?

- Regular physical activity can help improve mathematics, reading, and writing test scores, increase concentration, and reduce disruptive behavior (Kolbe, Green, & Foreyt, 1986, as cited in Symons, Cinelli, James, & Groff, 1997).
- "Children deprived of proper nutrition during the brain's most formative years score much lower on tests of vocabulary, reading comprehension, arithmetic, and general knowledge" (Brown & Pollitt, 1996, as cited in National Center for Children in Poverty, 1999).
- "...children who don't eat breakfast have trouble concentrating at school, becoming restless by late morning as glucose levels, the brain's basic fuel, drop" (New York State Board of Regents, 2011).

 "Crawling also reinforces babies' ability to cross their body's midline, which helps them develop directionality, an important skill for writing left to right" (Shamberg, 2009, as cited in New York State Board of

Regents, 2011).

- Outdoor play is related to an appreciation of nature and fosters diverse activities supporting creativity, language development, and collaboration (Fjørtoft, 2001).
- "Early Childhood is the most intensive period for the development of physical skills" (NASPE, 2007, as cited in Huffman & Fortenberry, 2011).



- "Teachers must encourage motor development with developmentally appropriate tasks that are achievable at any age or with any skill set" (Bruni, 2006, as cited in Huffman & Fortenberry, 2011).
- "Just as there is a progression in gaining cognitive abilities, so too there is a sequence in developing muscles. Four stages of fine motor development set the stage for early writing

- success—whole arm, whole hand, pincher, and pincer coordination" (Carvell, 2006, as cited in Huffman & Fortenberry, 2011).
- "Fine motor skills are difficult for preschoolers to master, because the skills depend on muscular control, patience, judgment and brain coordination" (Carvell, as cited in Huffman & Fortenberry, 2011).

How do traditional cultural skills, values, beliefs, and lifeways align with state and local school expectations?

- Children use their senses to assist and guide learning.
- Children use sensory information to plan and carry out movements.
- Children engage in a variety of physical fitness activities.
- Children demonstrate personal care and hygiene skills.
- —Examples from New York State PreKindergarten Early Learning Standards

I have walked in a mountain meadow bright with Indian paintbrush, lupine, and wild buckwheat, and I have seen . . . the male pine grosbeak . . . its dark striped wings nearly invisible in the soft, mottled light.

—N. Scott Momaday, Kiowa

Social & Emotional Development

What are the HSCDELF domain elements we are teaching?

- Social Relationships
- Self-Concept & Self-Efficacy
- Self-Regulation
- Emotional & Behavioral Health

WHY DOES IT MATTER?

- "Identity, language, and culture all take place in a specific family context" (Crago, 1988, as cited in California Department of Education, 2008).
- "Including a child's home language and home culture in the preschool classroom

 positively influences a child's sense of self-efficacy and social and cognitive development" (Chang, et al., 2007, as cited in California Department of Education).
- "Culture also influences young children's developing sense of self, as many cultures emphasize collective or group worth rather than worth based on individual accomplishments" (Rogoff, 2003, as cited in Tomlinson & Hyson, 2009).

- "Children's social and emotional functioning in the classroom is increasingly
 - recognized as an indicator of school readiness" (Blair, 2002, as cited in National Research Council, 2009).
- "Children who are motivated and connected to others in the early years of schooling are much more likely to establish positive trajectories of development in both social and academic domains" (Hamre & Pianta, 2001, as cited in National Research Council).
- "Social development and regulation of behavior are as much a part of development as cognitive learning" (Shonkoff, 2006, as cited in NIEER, 2007).



- "... children's self-regulation behaviors in the early years [are] more predictive of school achievement in reading and math than IQ scores" (Bodrova & Leong, 2008, and Blair, 2002, as cited in NY State Board of Regents).
- "The warmth and security of the preschool child's relationship with a preschool teacher are predictive of the child's subsequent classroom performance, attention skills, and social

- competence in the kindergarten and primary grade classrooms" (Peisner-Feinbert, et al., 2001, as cited in California Department of Education).
- "A secure attachment relationship between infants and their child care providers can complement the relationship between parents and young children and facilitate early learning and social development" (Howes, 1999, as cited in Schumacher & Hoffman, 2008).

How do traditional cultural skills, values, beliefs, and lifeways align with state and local school expectations?

- Show self-confidence as they develop abilities and potential.
- Demonstrate persistence with challenging activities, showing a can-do attitude.
- Demonstrate increasing self-direction and independence, especially with regard to self-help skills and separating from primary caregivers.
- Demonstrate increasing competence in regulating, recognizing, and expressing emotions verbally and nonverbally.
- Enjoy playing alone or near other children.

- Develop skills for coping with adversity and change.
- Express and manage anger appropriately.
- Develop an awareness of personal uniqueness, regarding themselves as having certain abilities, characteristics, preferences, and cultural identities.
- Recognize that they are members of different groups (e.g., family, preschool class, ethnic group).
- Use pretend play to express thoughts and feelings.
- —Examples from Early Learning Standards for North Carolina Preschoolers and Strategies for Guiding Their Success

Creative Arts Expression

What are the HSCDELF domain elements we are teaching?

- Music
- Creative Movement & Dance
- Art
- Drama

WHY DOES IT MATTER?

- "The arts are an excellent avenue for supporting emerging literacy and numeracy, nurturing the growth of the imagination, and increasing self-confidence" (Wolverton, 2000).
- "... pretend play strengthens cognitive capacities, including sustained attention, memory, logical reasoning, language and literacy skills, imagination, creativity, understanding of emotions, and the ability to reflect on one's own thinking, inhibit impulses, control one's behavior, and take another person's perspective" (Kavanaugh & Engel, & others, as cited in Tomlinson & Hyson, 2009).
- children who receive music instruction showed significantly greater gains in oral language and reading scores and in the development of phonemesegmentation fluency—the ability to separate words into the smallest units of sound (Fisher, D. 2001; Gromko, 2005).
- "Creative movement... is one of the best ways for children to learn the social skills needed for working together" (Gilbert, 2002, as cited in Dow, 2010).



- "Songs, like predictable books, may help children link oral to written language through rhyme, rhythm, and repetition of vocabulary and story structure" (Colwell, 1994).
- "Art as a way to reflect on and communicate ideas is one of 'the hundred languages' children use to enhance and represent [or show] their learning" (Fraser & Gestwicki, 2002).

How do traditional cultural skills, values, beliefs, and lifeways align with state and local school expectations?

- Children use a variety of art materials for enjoyment and self-expression and demonstrate an appreciation for art.
- Children engage in a variety of musical activities for enjoyment and self-expression and demonstrate an appreciation for music.
- Children engage in a variety of creative movement activities for enjoyment and self-expression and demonstrate an appreciation for various forms of expressive movement.
- Children engage in pretend play for enjoyment and self-expression and demonstrate an appreciation for various forms of dramatic expression.
- —Examples from South Dakota Early Learning Guidelines

Whether they participate in the dances or not, Jemez children observe them, and long after the dancing days have passed, they remember them and continue to imitate them....

Through imitation and play, children develop a sense of pride about being Jemez. This is an important beginning or construction of their identity as a Jemez person.

—Romero-Little, Shendo, & Toya, 2011

Approaches to Learning

What are the HSCDELF domain elements we are teaching?

- Initiative & Curiosity
- Persistence & Attentiveness
- Cooperation

WHY DOES IT MATTER?

- "... preschool curriculum is most effective when it takes advantage of children's own interests and curiosity" (Bowman, Donovan, & Burns, 2001, as cited in Department of Health and Human Services, 2003).
- "If asking for assistance is a signal of a child's desire to persist, it is important that caregivers be responsive to that need. The value of persistence is thereby reinforced" (Stipek & Greene, 2001, as cited in New York State Board of Regents).
- "Agostin and Bain (1997) demonstrated that cooperation and self-control significantly predicted promotion and retention of kindergarten children" (McClelland, Morrison, & Holmes, 2000).
- "... cooperation is conducive to creating emotional health, leads to friendlier feelings among participants, promotes a feeling of being in control of one's life, increases self-esteem, results in greater sensitivity and trust toward others, and increases motivation" (Kohn, 1992, as cited in Pica, 2011).
- "Teachers can take concrete and conscious steps to help children develop positive attitudes about themselves and their abilities; develop the self-control and motivation to solve problems with others; and become respectful, contributing members of the community" (Epstein, 2007).

- In social pretend play, children must not only keep track of their own role but also those of their peers. As the pretend-play story evolves through interaction, children must adapt their play. The plot may change in ways they did not anticipate and may not even like, and they have to negotiate. Thus, shared imaginative play simultaneously depends on and builds social and cognitive flexibility (Diamond, 2006).
- "Children whose parents and teachers gave them high ratings on approaches to learning [self-control, attentiveness, task persistence, eagerness to learn, flexibility, organization, concentration] in kindergarten exhibited faster rates of growth in reading and math from kindergarten to fifth grade, compared with children with lower ratings" (Li-Grining et al., 2010, as cited in Chien, Harbin, Goldhagen, Lippman, & Walker, 2012).

How do traditional cultural skills, values, beliefs, and lifeways align with state and local school expectations?

- Children actively and confidently engage in play as a means of exploration and learning.
- Children exhibit curiosity, interest, and willingness in learning new things and having new experiences.
- Children demonstrate persistence.

- Children approach tasks, activities, and problems with creativity, imagination and/or willingness to try new experiences or activities.
- Children sustain interactions by cooperating, helping, and suggesting new ideas for play.
- —Examples from New York State PreKindergarten Early Learning Standards

My father went on talking to me in a low voice. This is how our people always talk to their children, so low and quiet, the child thinks he is dreaming. But he never forgets.

— Maria Chona, Tohono O'odham

Language Development

What are the HSCDELF domain elements we are teaching?

- Receptive Language
- Expressive Language

WHY DOES IT MATTER?

- "The first five years of life, and especially the years between one and four, are prime time for language learning. The brain is growing and developing rapidly, forming new connections as it learns.
 These connections, in turn, enable rapid information processing and new learning" (Shore, 1997, as cited in Bardige, 2005).
- "Preschool children's language achievements provide unique and complementary contributions to higher-level language achievements, including reading comprehension, decontextualized language abilities, and metalinguistic awareness" (Chaney & Burk, 1998, as cited in Justice, Mashburn, Pence, & Wiggins, 2008).
- "Oral language and literacy develop together... young children's ability to identify and make oral rhymes and to manipulate the
 - individual sounds in spoken words is an important indicator of their potential success learning to read" (Strickland, 2004).
- "Rich language experiences during the preschool years play an important role in ensuring that children are able to read with comprehension when they reach middle school" (Dickinson & Tabors, 2001).



- "A strong relationship has been found between experience with books during the early years and language development. Books contribute in many ways to children's language learning" (Schickedanz, 1999).
- "... the amount of verbal interactions between teachers and students largely accounted for the effects of broad indicators of child-care quality on language development" (Vasilyeva & Waterfall, 2011).

How do traditional cultural skills, values, beliefs, and lifeways align with state and local school expectations?

- Children understand increasingly complex sentences, including past, present, and future tenses.
- Children understand and use a growing vocabulary. Attend to language for longer periods of time, such as when books are read, people are telling stories, and during conversations.
- Children understand that people communicate in many ways, including through gestures, sign language, facial expressions, and augmentative communication devices.
- Children consistently respond to requests for information or action (e.g., respond to questions and follow one and two step directions).

- Children comprehend and use language for multiple social and cognitive purposes (e.g., understand and talk about feelings, ideas, information, and beliefs).
- Children develop familiarity with sounds in words (e.g., listening to, identifying, recognizing, and discriminating).
- —Examples from Early Learning Standards for North Carolina Preschoolers and Strategies for Guiding Their Success

It takes three generations to lose the language. But by focusing on children, you can get it back in one generation.

— Michael Skenadore, Director, Menominee Nation Early Childhood-Head Start/Early Head Start, Wisconsin

Literacy Knowledge & Skills

What are the HSCDELF domain elements we are teaching?

- Book Appreciation & Knowledge
- Phonological Awareness
- Alphabet Knowledge
- Print Concepts & Conventions
- Early Writing

WHY DOES IT MATTER?

- "Children who are read to more frequently and from an earlier age tend to have a greater interest in literacy, exhibit superior literacy skills during the preschool and school years, choose reading more frequently, initiate reading sessions on their own, and show greater engagement during reading sessions" (California Department of Education, 2008).
- "As young children get more involved with written text by being read to, examining books, and observing others write, they begin to experiment with writing" (California Department of Education, 2008).
- "Engaging children in early writing also helps them learn about print and the letters and words they eventually will read and

- spell" (Burns, Griffin, & Snow, 1999, as cited in Tomlinson & Hyson, 2009).
- "Phonological awareness is one of the most powerful predictors of later success in reading" (Tomlinson & Hyson, 2009).
- "Key early literacy predictors of reading and school success include oral language, Alphabetic Code, and print knowledge" (Strickland & Riley-Ayers, 2006).
- "... adult-child relationships function as a support to the development of basic processes fundamental to literacy, including attention, conceptual development, communication, reasoning, motivation and interest and help seeking" (Pianta, 2006).



- "... language input and support for literacy in the prekindergarten time period, at home and in preschool, is predictive of early literacy abilities in kindergarten, which in turn are highly predictive of skill in fourth-grade reading comprehension" (Tabors, Roach, & Snow, 2001).
- been identified as important during the early childhood years, including a strong vocabulary, phonological awareness, letter knowledge, background knowledge, and understanding of print concepts" (Dickinson & Tabors, 2001, & others, as cited in Páez, Bock, & Pizzo, 2001).

How do traditional cultural skills, values, beliefs, and lifeways align with state and local school expectations?

- Children begin to recognize print conventions and understand that print carries meaning.
- Children develop age-appropriate phonological awareness.
- Children begin to recognize the letters of the alphabet.

- Children demonstrate understanding of age-appropriate text read aloud.
- Children demonstrate motivation for literacy activities.
- Children demonstrate emergent writing skills.
- —Examples from *California Preschool Learning*Foundations

The language is your world view. The way you see the world (when speaking in my native language) . . . is so different from thinking in English. Every single sound of the language has a meaning to it, and unless you can understand those meanings, it is really hard to put that world view together.

— Jonathan Ross, Alaska Native Heritage Center

Logic & Reasoning

What are the HSCDELF domain elements we are teaching?

- Reasoning & Problem Solving
- Symbolic Representation

WHY DOES IT MATTER?

- "By engaging in the investigation of topics rooted in their own culture, children tend to become fully engaged in the process and remember and use these thinking strategies [asking questions, considering cause-and-effect relationships, predicting, investigating, recording, and discussing] when inquiring about other everyday topics" (Dubosarsky et al., 2011).
- "Critical thinking requires children to carefully and rigorously reflect on their past experiences and to use their memory to note relationships and make comparisons based on a set of criteria" (Zachopoulou & Makri, 2005, as cited in Marigliano & Russo, 2011).
- "Like the other essential skills, the skill of critical thinking follows a developmental path throughout childhood and into adulthood, but its use must also be promoted" (Galinsky, 2010).
- "Pretend play requires the ability to transform objects and actions symbolically; it is furthered by interactive social dialogue and negotiation; and it involves role taking, script knowledge, and improvisation. Many cognitive strategies are exhibited . . . such as joint planning, negotiation, problem solving, and goal seeking" (Bergen, 2002).



 "By developing... an attitude that allows for possibilities and promotes progress and problem solving—children improve their skills for effectively solving problems every day and in more challenging scenarios" (Dweck, 2006, as cited in Pawlina & Stanford, 2011).

"Embracing children's questions allows space for critical thinking and dialogue" (Kuby, 2011).

How do traditional cultural skills, values, beliefs, and lifeways align with state and local school expectations?

- Child actively engages in problem solving.
- Child identifies additional materials to complete a task.
- Child experiments and seeks additional clarity to further his/her knowledge.
- Child seeks out connections, relations, and assistance from peers and adults to complete a task.

- Child communicates more than one solution to a problem.
- Child chooses materials/props and uses novel ways to represent ideas, characters, and objects.
- —Examples from *New York State PreKindergarten Early Learning Standards*

A word has power in and of itself. It comes from nothing into sound and meaning; it gives origin to all things.

—N. Scott Momaday, Kiowa

Mathematics Knowledge & Skills

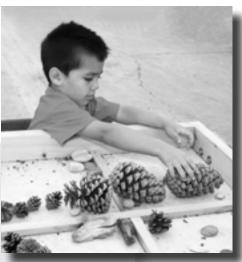
What are the HSCDELF domain elements we are teaching?

- Number Concepts & Quantities
- Number Relationships & Operations
- Geometry & Spatial Sense
- Patterns
- Measurement & Comparison

WHY DOES IT MATTER?

- "Thinking about patterns is another important precursor for learning mathematics in general and for learning algebra in particular" (California Department of Education, 2008).
- It is also important to understand what number words mean. Young children may think that pointing to an object and saying "one" applies a label or a name for that object. With experience, children begin to understand that number words can represent "how many" (Ginsburg, Lee, & Boyd, 2008).
- "The strongest predictor of math and reading skills [for ages 7–14] was children's

- math scores at kindergarten entry" (Duncan et al., 2007).
- "Very little is known about young children's data analysis abilities because this content area has not been heavily researched for such a young age group. However, there is a developmental sequence for sorting, an important skill needed to organize and analyze data" (Copley, 2010).
- "Developing preschoolers' spatial sense through block play helps build the foundation for later math success in the primary years and beyond" (Hanline, Milton, & Phelps, 2010, as cited in Tyminski & Linder, 2012).



- "Not only do children prefer using rulers but they can use them meaningfully . . . to develop understanding of measurement" (Clements, 2003).
- "The amount of teachers' math-related talk was significantly related to the growth of preschoolers' conventional mathematical knowledge over the school year . . . " (Klibanoff et al., 2006).

How do traditional cultural skills, values, beliefs, and lifeways align with state and local school expectations?

- The child understands numbers, ways of representing numbers and relationships between quantities and numerals.
- The child uses numbers and counting as a means for solving problems and determining quantity.
- The child demonstrates understanding of geometrical and spatial concepts.
- The child demonstrates an understanding of non-standard units to measure and make comparisons.

- The child anticipates, remembers, and describes sequence of events with increasing accuracy.
- The child demonstrates emerging knowledge of measurement.
- The child demonstrates the ability to investigate, organize, and create representations.
- —Examples from New Mexico Early Learning Guidelines: Birth Through Kindergarten

Survival of our nations depended on our children's activities, skills, knowledge and acts of bravery.

—David Wilkins, Lumbee

Science Knowledge & Skills

What are the HSCDELF domain elements we are teaching?

- Scientific Skills & Method
- Conceptual Knowledge of the Natural & Physical World

WHY DOES IT MATTER?

- "There is a profound similarity between the research methods used by scientists and the explorations of young children as a result of their natural curiosity" (Dewey, 1916, as cited in Shaffer, Hall, & Lynch, 2009).
- "... Gelman and Brenneman point out that 'to do science is to predict, test, measure, count, record, date one's work, collaborate and communicate'" (Gelman & Brenneman, 2004, as cited in Epstein, 2007).
- "Free exploration and experimentation help develop the inquiry skills and physical senses that serve as a basis for all science learning" (Lind, 2004, as cited in Blake, 2009).
- "Inquiry-based learning is an approach to learning that involves a process of exploring the natural or material world that leads to asking questions and making discoveries in the search for new understandings" (National Science Foundation, 2001).



- "Children will not understand concepts such as 'volume' if they do not have everyday concepts of 'liquids' and 'measuring.'... As children learn scientific concepts, the meaning of liquids and measuring changes. It is a two-way process scientific and everyday concepts grow into one another" (Bodrova & Leong, 2007).
- "Engaging in scientific investigation supports children's language, mathematics, and science reasoning skills. It provides rich opportunities for teachers to observe and document children's thinking in action" (Brenneman, 2009).

How do traditional cultural skills, values, beliefs, and lifeways align with state and local school expectations?

- The child uses the scientific method to investigate the physical and natural worlds and to hypothesize and make predictions.
- The child uses various tools to gather information (i.e., thermometers, magnifiers, rulers, and/or balances).
- The child acquires scientific knowledge related to life sciences.
- The child explores, observes, and describes a variety of living things and distinguishes from non-living things.

- The child explores, observes, describes, and participates in a variety of activities related to preserving the environment.
- The child acquires scientific knowledge related to earth science.
- The child investigates, compares, and contrasts seasonal and weather changes in the immediate environment.
- —Examples from *New Mexico Early Learning Guidelines: Birth through Kindergarten*

Tell me and I'll forget. Show me, and I may not remember. Involve me, and I'll understand.

—Author unknown

Social Studies Knowledge & Skills

What are the HSCDELF domain elements?

- Family & Community
- History & Events
- People & the Environment

WHY DOES IT MATTER?

- "The early years are ideal for children to begin to understand democratic norms and values (justice, equality, etc.), especially in terms of the smaller social entities of the family, classroom, and community.... They need to understand how as individuals they can contribute to society" (NCSS Task Force on Early Childhood/Elementary Social Studies, 1988).
- "Social studies curricula can support children as they solve classroom and school issues as well as investigate

- neighborhood and community problems with the goal of enhancing understanding and civic awareness and pride" (Mindes, 2005).
- "Conversations should include discussion of events, experiences, or people that are beyond the here and now—events from the past, the future, or the imagination" (Department of Health and Human Services, 2003).



- "As your child begins to understand the difference between 'here' and 'other places," he establishes "a starting point for understanding differences of all kinds... to learn about other people, places, and ways of doing things" (Moore, 2012).
- "... as stewards of the earth, working beside their peers and adults, the children in the garden construct a sustainable future for themselves and their communities" (Nimmo & Hallett, 2008).

How do traditional cultural skills, values, beliefs, and lifeways align with state and local school expectations?

Through their exploration, play, and social interactions:

- Children demonstrate an understanding of self, families, and cultures.
- Children demonstrate an understanding of what it means to be a participating member of groups and communities.
- Children demonstrate an understanding of the passage of time and how the past influences their future.
- Children demonstrate an awareness of their physical environment and its impact on daily living.
- Children demonstrate an understanding of how people work together to grow, produce, distribute, and consume goods and services that meet their wants and needs.
- —Examples from South Dakota Early Learning Guidelines

Let us boldly implement what our ancestors practiced and take the time to bring forth the knowledge, values, ceremonies, social and political institutions that bring out the spirit of every human child, no matter what age.

—David Wilkins, Lumbee

Culturally Responsive Parent, Family, and Community Engagement

When Cora came home from Head Start class one day, her Auntie was visiting. She was so excited to see her. Auntie was helping Cora's mom prepare a snack, and she invited Cora to join them. As they were cleaning the blueberries that Auntie just picked and brought to share, Auntie began to tell Cora all about berry picking and the significance it has for their people. After she was finished, they moved to the table, and they started to eat the blueberries. Auntie asked Cora to tell her the story about her day at Head Start. She encouraged Cora by nodding her head, smiling, and allowing for extended periods of silence. Cora didn't share much about her day, but Auntie knew Cora was learning about storytelling, so she did not pressure her.

That night, everyone was sitting around in the living room and the adults started to tell their stories of picking blueberries. Auntie shared what an elder had taught her about storytelling and how important it is to share their culture with one another. Cora and her brother listened, and soon Cora started to tell about the last time she picked blueberries. Cora's mom asked questions to help Cora add details to her story.

Auntie was visiting for a week, so each day she would have Cora help prepare a snack and would share a story with her. In the evenings, the family would gather together. The adults would share stories and highlight specific details, sequences of events, and how what they were doing was part of their culture.

Each Day, Auntie would ask Cora about her day in Head Start. By modeling storytelling and then asking Cora to share about her day, Auntie knew she was developing the skill of storytelling. Toward the last part of her visit, Auntie encouraged Cora to share the story of picking blueberries during Circle Time. She offered to come to the school to assist, and Cora's mom made arrangements with the teacher. Cora was so excited to have Auntie visit her class. Cora learned from her Auntie about the importance of sharing stories about their lives and how important details were in their stories. Cora could hardly wait for the weekend. She would be going blueberry picking with Brother and Mom and she would soon have more stories to share.

Because storytelling is part of family and community life, Cora's auntie shares meaningful stories about blueberries, and she engages Cora in the process. As she tells stories, auntie imparts information about how to live and what is valuable. She also encourages Cora to tell her own stories and to learn by participating in a cultural tradition that is integral to the community. Auntie knows that, as Cora engages in storytelling, her confidence, knowledge, and skills will grow. Telling stories will also support her in all aspects of learning, including school readiness.

As ancestors have done over the ages, when adults engage in children's learning, they help to

- enhance children's self-esteem,
- · encourage children's school success, and
- support children to grow and thrive, becoming contributing members of their communities.



When parents and family members feel involved in their children's learning, children develop positive attitudes toward school and gain a better understanding of the schooling process—all of which serves to help children learn.

Culturally based education recognizes the language, experiences, values and knowledge of children, their families, and their communities.

—Dubosarsky et al.

Culturally Responsive Parent, Family, and Community Engagement examines three areas:

- 1. Parent, family, and community engagement that supports school readiness and closes the achievement gap
- 2. Strategies for working with children and families that support school readiness and close the achievement gap
- 3. Research that shows why family and community engagement is crucial to all aspects of young children's development

Head Start was created so that children and families living in poverty can achieve their optimal potential.



Since Head Start's founding, research has

- shown that children are most susceptible to the impact of poverty during the early childhood years, and
- identified specific approaches for staff to use to support children living in poverty to close the achievement gap.

Family-school-community engagement is participatory, meaningful, sensitive, collaborative, and connected.

-McWilliams et al.

How Does Family Engagement Support Children's Learning at Home and at School?

The Head Start Parent, Family, and Community Engagement Framework is specifically oriented toward the support of school readiness and identifies the following seven family outcomes:

Family Outcomes from Supporting School Readiness

- Family Well-Being
 - Preserving and supporting families' cultural identities and languages
- Positive Parent-Child Relationships
 - Building upon children's interests and extending learning at home and school
- Families as Lifelong Educators
 - Sharing knowledge/skills/stories
- Families as Learners
 - Assisting with a specific activity or field trip
- Family Engagement in Transitions
 - Sharing cultural and linguistic backgrounds to support transition to school
- Family Connections to Peers and Community
 - Assisting in the classroom
- Families as Advocates and Leaders
 - Helping select and plan cultural activities for the curriculum

Engaging Families and Communities to Support Children's Learning at Home and at School

To ensure positive child and family outcomes, it is critical that Head Start staff use the following key strategies with families and children:

- Establishing a trusting relationship that is based on shared communication and knowledge between teachers and families
- Not assuming the role of experts but involving parents and other primary caregivers in making choices and decisions about the child's development and learning. The result is shared goals that support the child and family
- Sharing power and leadership to best meet the needs of the child
- Knowing the different needs and expectations of families and community members is essential. This knowledge supports the program and teachers to be intentional when engaging with different families and community members
- Knowing families and community members well also guides the program and teachers in providing a variety of opportunities to become involved, to provide program input, and to participate in leadership roles
- Collecting and sharing data about the child with staff and parents and using data effectively in supporting child outcomes and transition between programs

Program staff work with community elders to reinforce the strong connection between multiple generations and young children's learning outcomes. Collaboration and communication build trust between schools, families, and partners.

—McWilliams et al.

Ways to Engage Families, Elders, and Community Members

Invite families, Elders, and community members to:

- Share knowledge/skills/stories
- Assist with a specific activity or field trip
- Assist in the classroom
- Help select and plan cultural activities
- Build upon children's interests and extend learning at home and school
- Provide materials

WHY DOES IT MATTER?

- "An extensive and growing literature documents the importance of school and family connections for increasing student success in school and for strengthening school programs" (Epstein & Dauber, 1991).
- "[W]e must also work to build linkages between families and schools and between schools and communities. It is only . . . through intersystem collaboration within our communities . . . that we can build a broad enough, intense enough network of protection for all children and families" (August, 1991).
- Parental involvement in a child's preschool experience is especially important for the later school success of children from culturally,

- linguistically, and socioeconomically diverse families (Fantuzzo, McWayne, Perry, & Childs, 2004).
- "Participating in their children's education is a priority among families, regardless of their education and socioeconomic status" (Muenchow, 2003).
- Family-centered care—where families are treated as partners—strengthens families and is particularly important for families in crisis, whose children are at risk for abuse, and for families with children who have special needs (Center for the Study of Social Policy, 2007).

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MORE REASONS IT MATTERS . . .

- In homes where parents engage their children in learning activities, the children achieve better in their early years and through elementary school (Coghlan et al., 2009).
- Schools' efforts to promote parent involvement and actual parental engagement are more important to a child's school success and learning than parental income or level of education (Funkhouser & Gonzalez, 1997).

How do traditional cultural skills, values, beliefs, and lifeways align with state and local school expectations?

- Families are the first and most consistent teachers that children experience in their lives.
- Families and early educators play a very important role in supporting children's growth and development, as do program administrators, policymakers, and community members.
- Engaging parents, principals, directors, funders, and others interested in the welfare of young children is essential to support children's development.
- Early educators can use the "Widely Held Expectations" [from North Carolina's Early Learning Standards] as a common starting point for working with families—to help them understand and support age-appropriate goals for their children that can be shared between home and school.
- Children will make the most progress when early educators and families work together. Therefore, each of the examples involving the developmental domains in this book includes strategies specifically written for parents. Again, please understand that these are only examples; they are for you to adapt and change in whatever ways suit your program.
- Policymakers and community leaders can fill a vital role in supporting the development of young children by taking the lead in educating the public about the importance of high-quality early education and by promoting the use of the Widely Held Expectations. This could take the form of soliciting input on early childhood policies and programs, advocating for funding, and promoting collaboration and cooperation among agencies and organizations that serve young children and their families (Example from North Carolina's *Early Learning Standards*, Part 3: Guiding Principles).

Partnering with Families to Close the Achievement Gap Associated with Poverty

How does partnering with families help to close the achievement gap associated with poverty?

- Parents who are overwhelmed by economic need may not know where to find basic health services. Head
 Start teachers can let them know about available resources, thus supporting family health and better learning
 conditions.
- Head Start programs can help both families and children learn about good nutrition, the key to physical and mental growth and development.
- The literacy focus of Head Start can help families break the intergenerational cycle of illiteracy that is often associated with poverty.
- Parent-Family-Community Coordinators in Head Start help families connect with resources that are designed to relieve them of specific economic burdens: paying essential electric bills, receiving mental health services and counseling, etc.
- Head Start programs are designed to include family members in leadership roles, thus providing them with professional experiences that can lead to job opportunities. Parent-Family-Community coordinators also connect family members to job training programs and eventually favorable employment opportunities.

WHY DOES IT MATTER?

- Inadequate nutrition, deprived early learning opportunities, and unsafe neighborhoods negatively affect a young child's developing brain (National Scientific Council on the Developing Child, 2007).
- Children are most susceptible to the impact of poverty during the early childhood years because this is when the brain is most vulnerable.... Healthy development in all domains depends on positive, supportive relationships (Duncan & Brooks-Gunn, 1997).

MORE REASONS IT MATTERS ...

- Children growing up in chronically poor families "show more behavior problems and lower cognitive performance than those who are growing up in homes that are poor during some but not all of the child's early years" (Espinosa, 2010).
- Financial challenges can lead to increased levels of marital conflict, family anxiety, and individual depression, which impair a parent's ability to provide a warm, supportive, and enriching atmosphere for their children (Aber et al., 1997).
- "Community, family, and cultural values promote the resilience and well-being of youth.....
 The presence of these positive outcomes, in the face of substantial adversity... points to the resilience of American Indian youth" (LaFramboise et al., 2006).
- "Research about... the academic performance of Native American children shows that interweaving cultural topics with daily activities strengthens their identity and leads to better outcomes" (Demmert & Towner, 2003).

What strategies help close the achievement gap and promote school readiness?

- Engage with families to help them realize that children who attend school regularly are more likely to succeed.
- Initiate high-quality adult-child interactions, including adults' use of language, to start and maintain conversations, to build vocabulary, and to elaborate upon ideas and information.
- Create a positive emotional climate in the classroom.
- Promote children's continued development of their native language and culture.
- Read books daily, using multiple oral language strategies, such as talking about the book before and after the story, explaining new words during reading, etc.
- Support families to provide home environments that nurture learning and language through daily, extended conversations, reading, and planned learning experiences.
- Provide activities that promote children's enriched vocabulary, levels of executive function and specific approaches to learning, letter knowledge, print concepts, and phonological awareness.
- Establish home and program partnerships that support access to social resources and family self-sufficiency.

Notes

References

- Aber, J. L., Bennett, N. G., Conley, D. C., & Li, J. (1997). The effects of poverty on child health and development. *Annual Review of Public Health,* 18, 463–483.
- Action for Healthy Kids. (2004). *The role of sound nutrition and physical activity in academic achievement*. Retrieved from http://www.californiahealthykids.org/articles/NPA_3.pdf
- Agostin, T. M., & Bain, S. K. (1997). Predicting early school success with developmental and social skill screeners. *Psychology in the Schools*, 34, 219–228.
- August, B. B. (1991). Fostering resiliency in kids: Protective factors in the family, school, and community. Retrieved from http://friendsofthechildrenboston.org/
- Barclay, K. D., & Walwer, L. (1992). Linking lyrics and literacy through song picture books. Young Children, 47(4), 76–85.
- Bardige, B. (2005). At a loss for words: How America is failing our children and what we can do about it. Philadelphia, PA: Temple University Press.
- Bergen, D. (2002). The role of pretend play in children's cognitive development. *Early Childhood Research and Practice*, 4(1). Retrieved from http://ecrp.uiuc.edu/v4n1/bergen.html
- Blair, C. (2002). School readiness: Integrating cognition and emotion in a neurobiological conceptualization of children's functioning at school entry. *American Psychologist*, *57*(2), 111–127.
- Blake, S. (2009). Engage, investigate, and report: Enhancing the curriculum with scientific inquiry. Young Children, (64)6, 49–53.
- Bodrova, E., & Leong, D. J. (2008). Developing self-regulation in kindergarten: Can we keep all the crickets in the basket? *Young Children, 63*(2), 56–58.
- Bodrova, E., & Leong., D. J. (2007). Tools of the mind: The Vygotskian approach to early childhood education (2nd ed.). Upper Saddle River, NJ: Pearson/Merrill Prentice Hall.
- Bowman, B., Donovan, M., & Burns, M. (Eds.). (2001). Eager to learn: Educating our preschoolers. Washington, DC: National Research Council.
- Brenneman, K. (2009). Preschoolers as scientific explorers. Young Children, 64(6) 54-60. Washington, DC: NAEYC.
- Brown, J. L., & Pollitt, E. (1996). Malnutrition, poverty, and intellectual development. Scientific American, 74(2), 38–43.
- Bronfenbrenner, U. (1979). The ecology of human development: Experiments by nature and design. Cambridge, MA: Harvard University Press.
- Bruni, M. (200). Fine motor skills for children with Down syndrome: A guide for parents and professionals. Bethsda, MD: Woodbine House.
- Burns, M., Griffin, P., & Snow, C. (1999). Starting out right: A guide to promoting children's reading success. National Academy of Sciences. Washington, DC: National Research Council.
- California Department of Education. (2008). *California pre-school learning foundations* (Vol. 1). Sacramento, CA. Retrieved from http://www.cde.ca.gov/sp/cd/re/documents/preschoollf.pdf
- Carvell, N. (2006). Language enrichment activities program LEAP (Vol. 1). Dallas, TX: Southern Methodist University.

- Center for the Study of Social Policy. (2007). Strengthening families: A guidebook for early childhood programs. Washington, DC: Author.
- Chaney, A., & Burk, T. (1998). Teaching oral communication in grades K-8. Des Moines, IA: Allyn and Bacon.
- Chang, F., et al. (2007). Spanish speaking children's social and language development in pre-kindergarten classrooms. *Journal of Early Education and Development*, 18(2), 243–69.
- Chien, N., Harbin, V., Goldhagen, S., Lippman, L., & Walker, K.E. (2012). Encouraging the development of key life skills in elementary school-age children: A literature review and recommendations to the Tauck Family Foundation. *Child Trends: Work Paper* (Publication #2012-28). Retrieved from http://www.tauckfamilyfoundation.org/resources/reports-tools
- Clements, D. (2003). Measurement in pre-k to grade 2 mathematics. In Clements, D. H., DiBiase, A., & Sarama, J. (Eds.), *Engaging young children in mathematics: Standards for early childhood mathematics education* (Studies in Mathematical Thinking and Learning Series). Mahwah, NJ: Lawrence Erlbaum Associates.
- Clements, D. H. (2004a). Major themes and recommendations. In D. H. Clements, J. Sarama, & A. M. DiBiase (Eds.), *Engaging young children in mathematics: Standards for early childhood mathematics Education*. Mahwah, NJ: Erlbaum.
- Coghlan, M., Bergeron, C., White, K., Sharp, C., Morris, M., & Rutt, S. (2009). *Narrowing the gap in outcomes for young children through effective practices in the early years*. Centre for Excellence and Outcomes in Children and Young People's Services. Retrieved from http://www.c4eo.org.uk/themes/earlyyears/ntg/files/c4eo_narrowing_the_gap_full_knowledge_review.pdf
- Copley, J. (2010). *The young child and mathematics* (2nd ed.). Washington, DC: National Association for the Education of Young Children; Reston, VA: National Council of Teachers of Mathematics.
- Crago, M. B. (1988). Cultural context in communicative interaction of Inuit children. *Dissertation Abstracts International*, *50*(1-A). Retrieved from http://www.c4eo.org.uk/themes/earlyyears/ntg/files/c4eo_narrowing_the_gap_full_knowledge_review.pdf
- Demmert, Jr., W. G., & Towner, J. C. (2003). A review of the research literature on the influences of culturally based education on the academic performance of Native American students. Portland, OR: Northwest Regional Educational Laboratory.
- Department of Health and Human Services. (2003). Domain 1: Language development. Focusing on child development. Retrieved from http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/eecd/domains%20of%20child%20development
- Department of Health and Human Services. (2003). Domain 7: Approaches to learning. *Focusing on child development*. Retrieved from http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/eecd/domains%20of%20child%20development
- Dewey, J. (1916). Democracy and education: An introduction to the philosophy of education. New York, NY: The Free Press.
- Diamond, A. (2006). The early development of executive functions. In E. Bialystok & F. Craik (Eds.), *Lifespan cognition: Mechanisms of change* (pp. 70–85). New York, NY: Oxford University Press.
- Dickinson, D. K., & Tabors, P. O. (2001). Beginning literacy with language: Young children learning at home and school. Baltimore, MD: Paul H. Brookes.
- Dow, C. B. (2010). Young children and movement: The power of creative dance. Young Children 65(2), 30–35
- Dubosarsky, M., Murphy, B., Roehrig, G., Frost, L. C., Jones, J., Carson, S. P., Londo, N., Melchert, C. J. B., Gettel C., & Bement, J. (2011, September).

 Animosh tracks on the playground, minnows in the sensory table: Incorporating cultural themes to promote preschoolers' critical thinking in American Indian Head Start classrooms. *Young Children*, 66(5), 20–29.

- Duncan, G. J., Dowsett, C. J., Claessens, A., Magnuson, K., Huston, A. C., Klebanov, P., Pagani, L. S., Feinstein, L., Engel, M., Brooks-Gunn, J., Sexton, H., Duckworth, K., & Japel, C. (2007). School readiness and later achievement. *Developmental Psychology*, 43(6).
- Duncan, G., & Brooks-Gunn, J. (Eds.) (1997). Consequences of growing up poor. Russell Sage Foundation: New York.
- Dweck, C. (2006). Mindset. New York, NY: Ballantine.
- Epstein, A. S. (2007). The intentional teacher: Choosing the best strategies for young children's learning (p. 71). Washington, DC: National Association for the Education of Young Children.
- Epstein, A. (2009). *Me, you, us: Social-emotional learning in preschool* (p. 17). Ypsilanti, MI: HighScope Press and Washington, DC: National Association for the Education of Young Children.
- Epstein, J. L., & Dauber, S. L. (1991, January). School programs and teacher practices of parent involvement in inner-city elementary and middle schools. *The Elementary School Journal*, *91*(3), 289–305.
- Espinosa, L. (2010). *Getting it right for young children from diverse backgrounds: Applying research to improve practice*. National Association for the Education Young Children. Washington, DC.
- Fantuzzo, J., McWayne, C., Perry, M., & Childs, S. (2004). Multiple dimensions of family involvement and their relations to behavioral and learning competencies for urban, low-income children. *The School Psychology Review*, 33(4), 467–480.
- Fisher, D. (2001). Early language learning with and without music. Reading Horizons, 42(2), 39-49
- Fjørtoft, I. (2001). The natural environment as a playground for children: The impact of outdoor play activities in pre-primary school children. *Early Childhood Education Journal*, 29(2), 111–117.
- Fraser, S., & Gestwicki, C. (2002). Authentic childhood: Exploring Reggio Emilia in the classroom. Albany, NY: Delmar Thomson Learning.
- Funkhouser, J.E., & Gonzales, M.R. (1997). Family involvement in children's education: Successful local approaches—An idea book. Retrieved from http://www.ed.gov/pubs/FamInvolve/
- Galinsky, E. (2010). *Mind in the making: The seven essential life skills every child needs* (p. 204). Washington DC: National Association for the Education of Young Children.
- Gelman, R., & Brenneman, K. (2004). Science learning pathways for young children. *Early Childhood Research Quarterly*, 19, 150–158.
- Gilbert, A. G. (2002). Teaching the three Rs through movement experiences. Silver Spring, MD: National Dance Education Organization.
- Ginsburg, H. P., Lee, J. S., & Boyd, J. S. (2008). Mathematics education for young children: What it is and how to promote it. *Social policy report:* Giving child and youth development knowledge away, 22(1), 1–23.
- Gromko, J. E. (2005). The effect of music instruction on phonemic awareness in beginning readers. *Journal of Research in Music Education*, 53(3), 199–209.
- Hamre, B. K., & Pianta, R. C. (2001). Early teacher-child relationships and the trajectory of children's school outcomes through eighth grade. *Child Development*, 72(2), 625–638.
- Hanline, M. F., Milton, S., & Phelps, P. C. (2010). The relationship between preschool block play and reading and math abilities in early elementary school: A longitudinal study of children with and without disabilities. *Early Child Development and Care*, 180, 1005–1017.

- Howes, C. (1999). Attachment relationships in the context of multiple caregivers. In J. Cassidy & P. Shaver (Eds.), *Handbook of attachment: Theory, research and clinical applications*. New York: Guilford.
- Huffman, J. M., & Fortenberry, C. (2011). Helping preschoolers prepare for writing: Developing fine motor skills. Young Children, 66(5), 102–103.
- Justice, L. M., Mashburn, A., Pence, K. L., & Wiggins, A. (2008). Experimental evaluation of a preschool language curriculum: Influence on children's expressive language skills. Journal of Speech, Language, and Hearing Research, 51(4), 985.
- Kavanaugh, R. D., & Engel, S. (1998). The development of pretense and narrative in early childhood. In O. Saracho & B. Spodek (Eds.), *Multiple perspectives on play in early childhood education* (pp. 80–99). Albany, NY: State University of New York.
- Klibanoff, R. S., et al., (2006). Preschool children's mathematical knowledge: The effect of teacher "math talk." *Developmental Psychology*, 42(1), 59–69.
- Kohn, A. (1992). No contest: The case against competition—Why we lose in our race to win (Rev. ed.). Boston, MA: Houghton Mifflin.
- Kolbe L. J., Green L., Foreyt J., et al. (1986). Appropriate function of health education in schools: improving health and cognitive performance. In N. Krairweger, J. Arasteli, & M. Cataldo (Eds.), *Child health behavior: A behavioral pediatrics perspective*. New York, NY: John Wiley.
- Kuby, C. (2011). Making space for critical dialogue with 5- and 6-year-olds. In *Young Children*, 66(5), 36–43. Washington, DC: National Association for the Education of Young Children.
- LaFromboise, T. D., Hoyt, D. R., Oliver, L., & Whitbeck, L. B. (2006). Family, community, and school influences on resilience among American Indian adolescents in the upper midwest. *Journal of Community Psychology*, 34(2), 193–209.
- Li-Grining, C. P., Votruba-Drzal, E., Maldonado-Carreno, C., & Haas, K. (2010). Children's early approaches to learning and academic trajectories through fifth grade. *Developmental Psychology*, 46, 1062–1077.
- Lind, K. (2004). Science in early childhood: Developing and acquiring fundamental concepts and skills. In *Dialogue on early childhood science, mathematics, and technology education* (Project 2061 series). Washington, DC: American Association for the Advancement of Science.
- Marigliano, M. L., & Russo, M. J. (2011). Moving bodies, building minds: Foster preschoolers' critical thinking and problem solving through movement. *Young Children*, *66*(5), 44–49.
- McClelland, M. M., Morrison, F. J., & Holmes, D. L. (2000). Children at risk for early academic problems: The role of learning-related social skills. *Early Childhood Research Quarterly*, 15(3), 307–329.
- McWilliams, M. S., Maldonado-Mancebo, T., Szczepaniask, P. S., & Jones, J. (2011, November). Supporting native Indian preschoolers and their families: Family-school-community partnerships. *Young Children*, *66*(6), 34–41.
- Mindes, G. (2005). Social studies in today's early childhood curricula. *Beyond the Journal: Young Children on the Web*. Retrieved from http://www.naeyc.org/files/yc/file/200509/MindesBTJ905.pdf
- Moore, T. (2012). Give your child a global view: Use tools your child already loves—music, art, and stories—to draw him in and make abstract concepts real. *Scholastic*. Retrieved from http://www.scholastic.com/resources/article/give-your-child-a-global-view
- Muenchow, S. (2003). *Preschool for all: Step by step* (p. 144). Palo Alto, CA: American Institutes for Research. Retrieved from http://www.plan4preschool.org/documents/up-air-toolkit.pdf

- National Association for Sport and Physical Education (NASPE) & American Heart Association. (2007). 2006 shape of the nation report: Status of physical education in the USA. Reston, VA: NASPE.
- National Center for Children in Poverty. (1999, June). *Poverty and brain development in early childhood*. http://www.nccp.org/publications/pdf/text_398.pdf
- National Council for the Social Studies (NCSS) Task Force on Early Childhood/Elementary Social Studies. (1988). Social studies for early childhood and elementary school children: Preparing for the 21st century. Retrieved from http://www.socialstudies.org/positions/elementary
- National Institute for Early Education Research. (2007). Harvard's Jack Shonkoff: Social, emotional and cognitive development are inextricably intertwined. *Preschool Matters*, *5*(5), 5.
- National Research Council. (2009). *Mathematics learning in early childhood: Paths toward excellence and equity.* Washington, DC: The National Academies Press.
- National Science Foundation. (2001). *Foundations: A monograph for professionals in science, mathematics, and technology education* (Vol. 2). Washington, DC: Author. Retrieved from http://www.nsf.gov/pubs/2000/nsf99148/pdf/nsf99148.pdf
- National Scientific Council on the Developing Child. (2007). *The timing and quality of early experiences combine to shape brain architecture: Working paper #5.* Harvard University. Retrieved from http://www.developingchild.net
- New Mexico State Children, Youth, & Families Department, Department of Health & Public Education. (2011). *New Mexico early learning guidelines birth through kindergarten*. Retrieved from https://www.newmexicoprek.org/Docs/PreKMaterials2010_2011/ELGs_web_version_Jan11.pdf
- New York State Board of Regents. (2011). New York State Prekindergarten Foundation for the Common Core. Retrieved from http://www.p12.nysed.gov/ciai/common_core_standards/pdfdocs/nyslsprek.pdf
- Nimmo, J., & Hallett, B. (2008). Childhood in the garden: A place to encounter natural and social diversity. Young Children, 63(1), 1–8.
- North Carolina State Board of Education, Department of Public Instruction. (2010). Foundations: Early learning standards for North Carolina preschoolers and strategies for guiding their success. Retrieved from http://www.earlylearning.nc.gov/Foundations/pdf/BW_condensed.pdf
- Páez, M., Bock, K., & Pizzo, L. (2001). Supporting the language and early literacy skills of English language learners: Effective practices and future directions. In D. Dickinson & S. Neuman (Eds.), *Handbook of early literacy research* (Vol. 3, p. 136). New York, NY: The Guilford Press.
- Pawlina, S., & Stanford, C. (2011). Preschoolers grow their brains: Shifting mindsets for greater resiliency and better problem solving. Young Children (66)5, 30–35.
- Peisner-Feinberg, E. S., Burchinal, M. R., Clifford, R. M., Culkin, M. L., Howes, C., Kagan, S. L., & Yazejian, N. (2001). The relation of preschool child-care quality to children's cognitive and social developmental trajectories through second grade. *Child Development*, 72(5), 1534–1553.
- Pianta, R. (2006). Teacher-child relationships and early literacy. In D. Dickinson & S. Neuman (Eds.), *Handbook of early literacy research* (Vol. 2, p. 150.) New York, NY: The Guilford Press.

- Pica, R. (2011). Learning by leaps and bounds: Helping children cooperate. Young Children, 66(6), 60–61.
- Rogoff, B. (2003). The cultural nature of human development. New York, NY: Oxford University Press.
- Romero, M. E. (2003). *Perpetuating the Cochiti way of life: A study of language socialization in a Pueblo community* (pp. 206–207). Unpublished doctoral dissertation, University of California, Berkeley, CA.
- Romero-Little, M. E., Shendo, K., & Toya, L. (2011, April). Lessons from the Jemez photovoice project: A look at child development from an indigenous perspective. Invited presentation at the *Early Childhood Heritage Language Summit: Celebrating Diversity in New Mexico*, Española, NM.
- Scarborough, H. S., & Dobrich, W. (1994). On the efficacy of reading to preschoolers. Developmental Review, 14(3), 245–302.
- Schickedanz, J. (1999). *Much more than the ABCs: The early stages of reading and writing*. Washington, DC: National Association for the Education of Young Children.
- Schumacher, R., & Hoffman, E. (2008). Promote continuity of care. *Charting progress for babies in child care: A CLASP child care & early education project*. Retrieved from http://www.clasp.org/babiesinchildcare/recommendations?id=0003
- Shaffer, L. F., Hall, E., & Lynch, M. (2009). Toddlers' scientific explorations: Encounter with insects. Young Children, (64)6, 19.
- Shamberg, S. (2009). *Preparing mind and body for childhood development: Simple sensory motor strategies for childcare providers*. Baltimore: Maryland.
- Shephard, R. J. (2008). The role of sound nutrition and physical activity in academic achievement. *Curriculum Review*, 48(2), 10–12.
- Shore, R. (1997). Rethinking the brain: New insights into early development. New York, NY: Families and Work Institute.
- Snow, C., Burns, M., & Griffin, P. (1998). *Preventing reading difficulties in young children*. Washington, DC: National Academies Press.
- South Dakota Department of Social Services. (2008). *South Dakota early learning guidelines*. Retrieved from http://doe.sd.gov/contentstandards/documents/EarlyLearningGuidelinesBook.pdf
- Strickland, D. (2004). Working with families as partners in early literacy. Reading Teacher, 58(1), 86–88. doi:10.1598/RT.58.1.9
- Strickland, D. S., & Riley-Ayers, S. (2006, April). Early literacy: Policy and practice in the preshool years. *Preschool Policy Brief, 10*. New Brunswick, NJ: National Institute for Early Education Research. Retrieved from http://nieer.org/resources/policybriefs/10.pdf
- Stipek, D., & Greene, J. (2001). Achievement motivation in early childhood: Cause for concern or celebration. In S. Golbeck (Ed.), *Psychological perspectives on early childhood education: Reframing dilemmas in research and practice* (pp. 64-91). Mahwah, NJ: Erlbaum.
- Symons, C.W., Cinelli, B., James, T.C., & Groff, P. (1997). Bridging student health risks and academic achievement through comprehensive school health programs. *Journal of School Health 67*(6), 220–227. doi: 10.1111/j.1746-1561.1997.tb06309.x
- Tabors, P.O., Roach, K. A., & Snow, C. E. (2001). Home language and literacy environment: Final Results. In D. K. Dickinson & P.O. Tabors (Eds.), Beginning literacy with language: Young children learning at home and school (pp. 111–138). Baltimore: Paul H. Brookes.
- Tomlinson, H. B., & Hyson, M. (2009). Developmentally appropriate practice in the preschool years—Ages 3–5. In C. Copple & S. Bredekamp, (Eds.), Developmentally appropriate practice in early childhood programs serving children from birth through age 8 (3rd ed.). Washington, DC: NAEYC.

- Tyminski, A. M., & Linder, S. M. (2012). Encouraging preschoolers' emerging mathematics skills. In A. Shillady (Ed.), *Spotlight on young children: Exploring math* (pp. 28–33). Washington, DC: National Association for the Education of Young Children.
- Vasilyeva, M., & Waterfall, H. (2011). Variability in language development: Relation to socioeconomic status and environmental input. In D. Dickinson & S. Neuman (Eds.), *Handbook of early literacy research* (Vol. 3, pp. 36–48). New York, NY: The Guilford Press.
- Whitehurst, G. J., and Lonigan C. J. (2001). Emergent literacy: Development from pre-readers to readers. In S. B. Newman & D. K. Dickinson (Eds.), *Handbook of early literacy research*. New York, NY: Guilford Press.
- Wolverton, D. E. (2000, April). For a child, life is a creative adventure. *Head Start Bulletin #67*. Retrieved from http://eclkc.ohs.acf.hhs.gov/hslc/hs/resources/eclkc bookstore
- Zachopoulou, E., & Makri, A. (2005). A developmental perspective of divergent movement ability in early young children. *Early Child Development and Care*, 175(1), 85–95.